

10/529095  
JC17 Rec'd PCT/PTO 24 MAR 2005

# AMENDMENTS TO THE SPECIFICATION

Please replace the heading beginning at page 1, line 1 with the following rewritten heading.

--DESCRIPTION RELATED APPLICATIONS--

Please insert the following paragraph beginning at page 1, line 1:

-- This application is a National Stage application of PCT Application No. PCT/JP2003/012062 filed September 22, 2003, which claims priority to Japanese Patent Application Nos. 2002-278189 filed September 24, 2002, and 2002-302321 filed October 16, 2002. These applications are hereby incorporated in their entirety. --

Please insert the following heading before the paragraph beginning at page 2, line 5.

--BACKGROUND--

Please replace the paragraph beginning at page 2, line 5, with the following rewritten paragraph:

--~~BACKGROUND ART~~—A ~~xerostomia~~ Xerostomia called “dry mouth” is normally thought to be caused by a generalized disease such as diabetes or a renal disease, mouth breathing, smoking, a side effect of a medicine or a treatment, a salivary gland related disease, a central or peripheral nerve disorder, a mental stress or the like. A connection of the dry mouth with dry eye is also considered.--

Please replace the heading beginning at page 4, line 14 with the following rewritten heading.

-- DISCLOSURE SUMMARY OF THE INVENTION--

Please replace the heading beginning at page 10, line 22 with the following rewritten heading.

-- BEST MODE FOR CARRYING OUT THE INVENTION DETAILED DESCRIPTION--

Please replace the paragraph beginning at page 11, line 6, with the following rewritten paragraph:

-- A sensor (not shown) that is included in the sensor unit 3 and that senses a water content is an electrostatic capacity sensor that measures the water content according to a change in dielectric constant. A moisture-sensitive high-molecular thin film is formed on a substrate, and an electrostatic capacity of the sensor changes according to the water content. The probe 2 is bent into a doglegged shape in a front view. As shown in Fig. 2, this is intended to facilitate putting the sensor unit 3 against any region of an intra-mouth membrane when the measuring unit 1 is held. A sensitive surface of the sensor unit 3 is sealed by a glass plate or a plastic plate, and a water content-sensitive sensor is provided in an inside surface of the sensor unit 3. The sensor unit 3 measures the water content of a measurement target region such as a tongue mucous membrane, a cheek mucous membrane, or a palate by pressing the sensor unit 3 against the measurement target region. ~~It is, therefore, preferable that the~~ According to one embodiment sensor unit 3 includes an elastic holding means for keeping a pushing pressure against the measurement target region constant or a pressure correction circuit. Needless to say, if the sensor unit 3 includes both the elastic holding means and the pressure correction circuit, a measurement accuracy of the sensor unit 3 is further enhanced.--

Please replace the paragraph beginning at page 12, line 11, with the following rewritten paragraph:

--The bag-like plastic film 8 in some embodiments is ~~preferably~~ a thermoplastic resin such as hydrophobic thermoplastic resin, e.g., polyethylene, polypropylene, nylon, or polyvinyl chloride which can be formed thin, and ~~particularly-preferable~~ in some embodiments, polyethylene. A thickness of the bag-like plastic film 8 is 2 to 20  $\mu\text{m}$ . If the thickness is 2  $\mu\text{m}$  or less, the plastic film 8 may possibly be broken during use. If the thickness exceeds 20  $\mu\text{m}$ , a water content measurement sensitivity of the sensor unit 3 is deteriorated and the measurement accuracy

thereof is deteriorated, as well. To improve the sensitivity and the accuracy of the sensor unit 3, therefore, the thickness of the plastic film 8 is ~~more preferably~~, in some embodiments, 2 to 15  $\mu\text{m}$ . The bag-like plastic film 8 that covers the sensor unit 3 to the probe 2 is replaced at every measurement. Due to this, even if an intra-mouth water content measurement is repeatedly conducted for a plurality of persons, it is possible to keep the measuring instrument highly hygienic.--

Please replace the paragraph beginning at page 13, line 1, with the following rewritten paragraph:

-- As shown in Fig. 7, an intra-mouth water content measuring instrument 11 is composed by a main body unit 12 and an intra-mouth insertion unit 13. The intra-mouth insertion unit 13 is composed by a probe 14 extending from one end of the main body unit 12 in a generally doglegged fashion, and a sensor unit 15 provided on a tip end of the probe 14. The main body unit 12 is an elongated cylinder that is easy to hold by a hand during a measurement. The main body unit 12 includes a display unit 16 that digitally displays a measured water content. The sensor unit 15 is hermetically sealed and a water content sensor is provided inside a sensitive surface thereof. A configuration and a type of the water content sensor are not limited to specific ones. However, in view of the sensor sensitivity, accuracy, stability, and the like, an electrostatic capacity sensor ~~is preferable~~ may be used. A bag-like cover 18 of an intra-mouth insertion unit replacement cover 17 according to the present invention is attached to the intra-mouth insertion unit 13.--

Please replace the paragraph beginning at page 14, line 12, with the following rewritten paragraph:

--The plastic films that constitute the bag-like cover 18 ~~preferably~~ consists, in some embodiments, of a thermoplastic resin such as hydrophobic thermoplastic resin, e.g.,

polyethylene, polypropylene, nylon, or polyvinyl chloride, and combinations thereof, which can be formed thinly ~~and particularly preferably consist of polyethylene,~~ A thickness of the bag-like cover 18 is 2 to 20  $\mu\text{m}$ . If the thickness is 2  $\mu\text{m}$  or less, the cover 18 may possibly be broken during use. If the thickness exceeds 20  $\mu\text{m}$ , the water content measurement sensitivity of the sensor unit 13 is deteriorated and the measurement accuracy thereof is deteriorated, as well. To improve the sensitivity and the accuracy of the sensor unit 13, therefore, the thickness of the bag-like cover 18 may be ~~is more preferably~~ 2 to 15  $\mu\text{m}$ . The bag-like plastic film 8 covering the sensor unit 13 to the probe 2 is replaced at every measurement. Due to this, even if an intra-mouth water content measurement is repeatedly conducted for a plurality of persons, it is possible to keep the measuring instrument highly hygienic. A thickness of the base sheet 21 is set such that a shape of the bag-like cover 18 can be kept. The catch piece 22 is made of paper and usage directions may be ~~are preferably~~ written thereon.--

Please replace the paragraph beginning at page 16, line 5, with the following rewritten paragraph:

The intra-mouth insertion unit replacement cover shown in Figs. 13 and 14 is constituted so that the bag-like cover 18 welded onto the base sheet 21 is covered and hermetically sealed with a surface cover film 23 welded onto the base sheet 21 so as to surround the cover 18. A welding portion 24 of the surface cover film 23 welded to the base sheet 21 is an easy-open seal foamed with a heat seal so as to facilitate releasing the surface cover film 23 from the base sheet 21. The surface cover film 23 is a polypropylene film which is sterilizable using ethylene oxide gas (EOG), and has a thickness of 15 to 50  $\mu\text{m}$ . The bag-like cover 19 according to this embodiment is harder to break when being released from the base sheet 21 if a base sheet-side part of the cover 18 is thicker. Therefore, it is appropriate to set a thickness of the base sheet 21-side part of the cover 18 at 20 to 50  $\mu\text{m}$  (in some embodiments preferably 20 to 30  $\mu\text{m}$ ) and a thickness of an upper side part thereof at 2 to 20  $\mu\text{m}$  (in some embodiments preferably 8 to 15  $\mu\text{m}$ ). An

optimum thickness of the base sheet 21-side part of the bag-like cover 18 is 20 to 30 and an optimum thickness of the upper-side part thereof is 8 to 15  $\mu\text{m}$ .--